DTC	**B1815/54**	**Short in Front Passenger Side Squib 2nd Step Circuit**

DTC	**B1816/54**	**Open in Front Passenger Side Squib 2nd Step Circuit**

DTC	**B1817/54**	**Short to GND in Front Passenger Side Squib 2nd Step Circuit**

DTC	**B1818/54**	**Short to B+ in Front Passenger Side Squib 2nd Step Circuit**

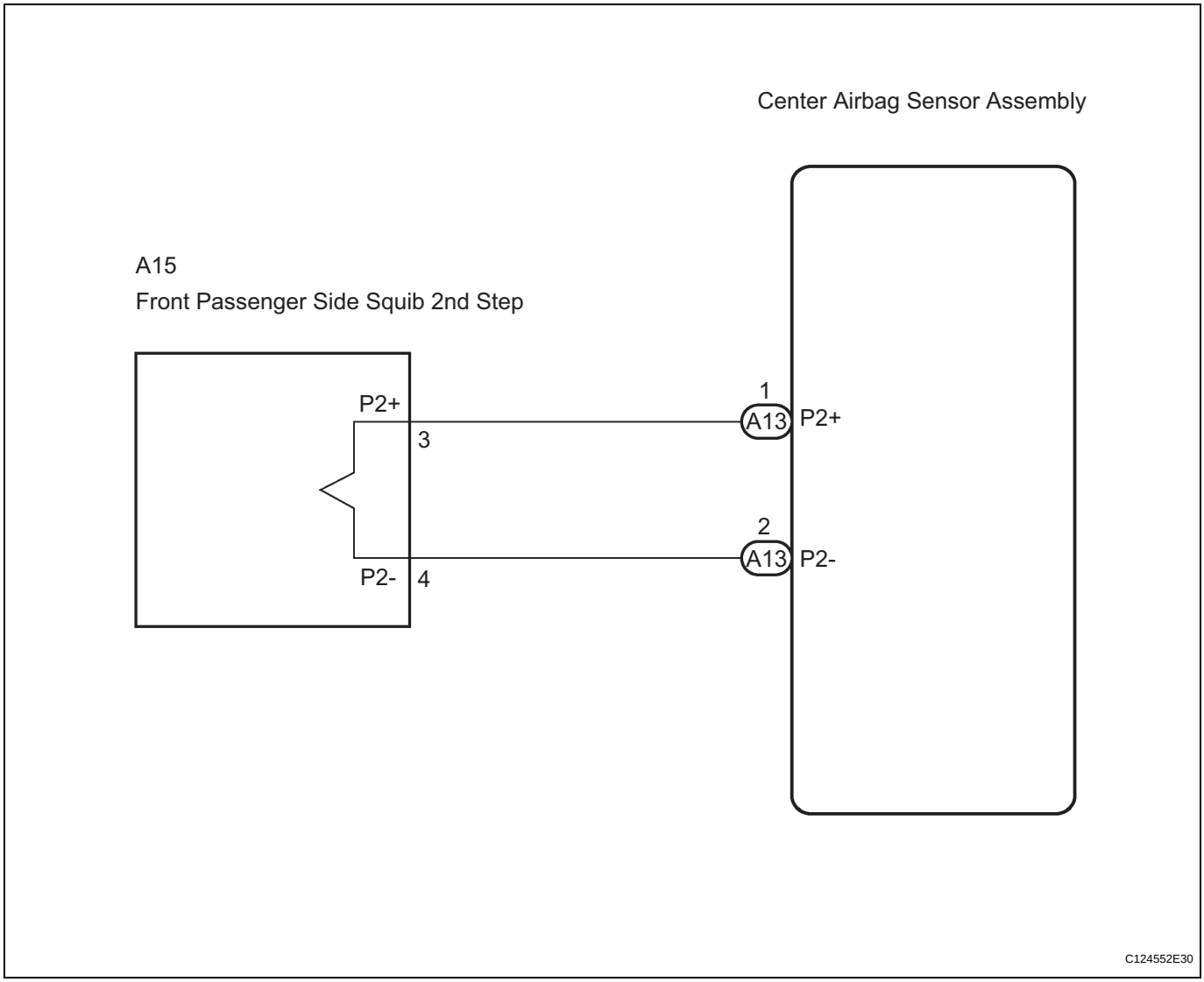
DESCRIPTION

The front passenger side squib 2nd step circuit consists of the center airbag sensor assembly and the front passenger airbag assembly.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are recorded when a malfunction is detected in the front passenger side squib 2nd step circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1815/54	• The center airbag sensor assembly receives a line short circuit signal 5 times in the front passenger side squib 2nd step circuit during primary check. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1816/54	• The center airbag sensor assembly receives an open circuit signal in the front passenger side squib 2nd step circuit for 2 seconds. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1817/54	• The center airbag sensor assembly receives a short circuit to ground signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1818/54	• The center airbag sensor assembly receives a short circuit to B+ signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly

RS

WIRING DIAGRAM



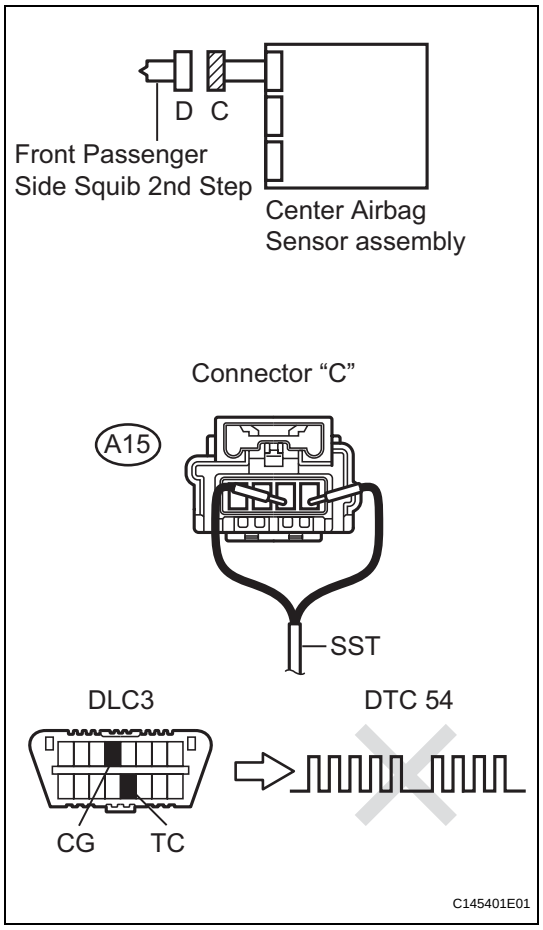
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting the "check mode" (signal check) with the intelligent tester (See page RS-37).
- After selecting the "check mode" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (See page RS-37).

RS

1	CHECK FRONT PASSENGER AIRBAG ASSEMBLY (FRONT PASSENGER SIDE SQUIB 2ND STEP)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the front passenger airbag assembly.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector "C" (orange connector).
CAUTION:
Never connect a tester to the front passenger airbag assembly (front passenger side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.
NOTICE:
- **Do not forcibly insert the SST into the terminals of the connector when connecting.**
- **Insert straight the SST into the terminals of the connector.**

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-34).
OK:
DTC B1815, B1816, B1817, B1818 or 54 is not output.
HINT:
Codes other than DTC B1815, B1816, B1817, B1818 and 54 may be output at this time, but they are not related to this check.

NG	Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY

2	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector "C".

RS

(d) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.

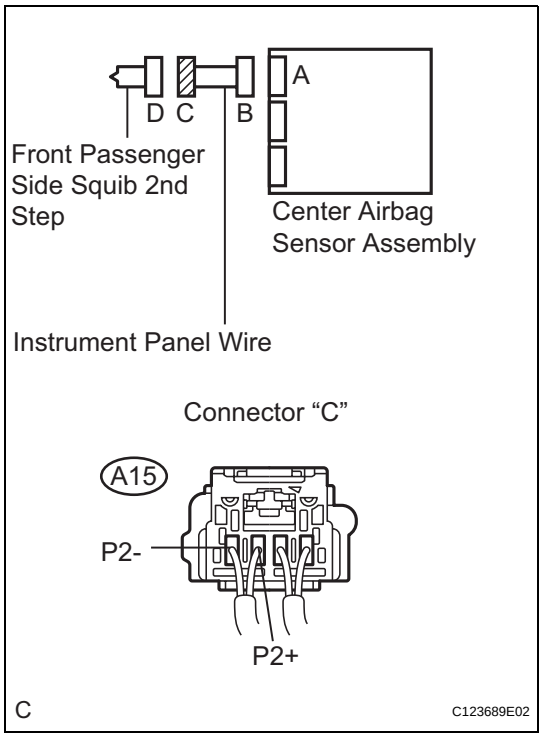
OK:

The lock button is not disengaged, or the claw of the lock is not damaged or deformed.

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

3 CHECK FRONT PASSENGER SIDE SQUIB 2ND STEP CIRCUIT



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check the short to B+ in the circuit.

(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.

(2) Turn the ignition switch to the ON position.

(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester connection	Condition	Specified condition
A15-3 (P2+) - Body ground	Ignition switch ON	Below 1 V
A15-4 (P2-) - Body ground	Ignition switch ON	Below 1 V

(c) Check the open in the circuit.

(1) Turn the ignition switch to the ON position.

(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.

(3) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
A15-3 (P2+) - A15-4 (P2-)	Always	Below 1 Ω

(d) Check the short to ground in the circuit.

(1) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
A15-3 (P2+) - Body ground	Always	1 MΩ or higher
A15-4 (P2-) - Body ground	Always	1 MΩ or higher

(e) Check the short in the circuit.

(1) Release the activation prevention mechanism built into connector "B" (See page RS-26).

(2) Measure the resistance according to the value(s) in the table below.

Standard resistance

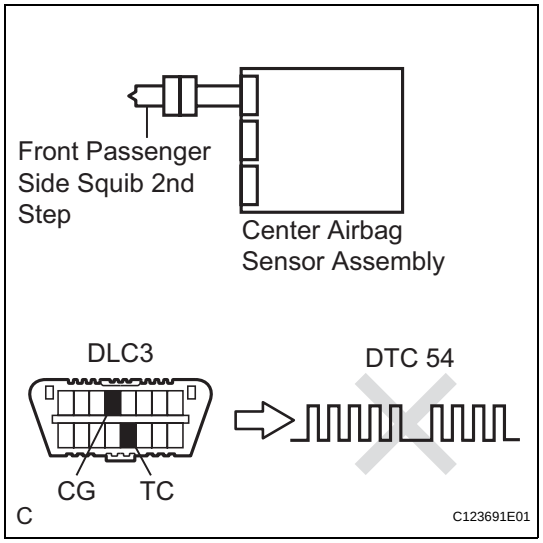
Tester connection	Condition	Specified condition
A15-3 (P2+) - A15-4 (P2-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

RS

OK

4 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the front passenger airbag assembly and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-34).
OK:
DTC B1815, B1816, B1817, B1818 or 54 is not output.
HINT:
Codes other than DTC B1815, B1816, B1817, B1818 and 54 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK